# La Vergne Water System Water Quality Report 2008

#### Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 10 of these contaminants. We found all of these contaminants at safe levels.

#### What is the source of my water?

Your water, which is surface water, comes from the Percy Priest Lake. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The La Vergne Water System sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.shtml p or you may contact the Water System to obtain copies of specific assessments.

# Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call Thomas Champagne at 615-793-6536.

#### How can I get involved?

Our Mayor/Alderman Workshop / Meetings are on the last Thursday at 5:00pm and first Tuesday at 7:00pm of each month. Please feel free to participate in these meetings.

#### Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to the rules.

#### Other Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. La Vergne Water System's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

#### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. La Vergne Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

#### **Water System Security**

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 615-793-6536

# Water Quality Data

#### What does this chart mean?

- MCLG Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- MCL Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the
  MCLGs as feasible using the best available treatment technology. To understand the possible health effects described for many regulated
  constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having
  the described health effect.
- MRDL: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG: Maximum residual disinfectant level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- <u>AL</u> Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system
  must follow
- Parts per million (ppm) or Milligrams per liter (mg/l) explained in relation to time one part per million corresponds to one minute in two years. Parts per billion (ppb) or Micrograms per liter explained in relation to time as one part per billion corresponds to one minute in 2.000 years.
- Nephelometric Turbidity Unit (NTU) nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

• TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	NO	1		09/08		0	<2 positive samples	Naturally present in the environment
Turbidity <sup>1</sup>	NO	1.36	.05-1.36		NTU	n/a	TT	Soil runoff
Copper*	NO	90th% =.074		08/08	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	1.13	.95-1.13	2008	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead*	NO	90th% =1.6		08/08	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	NO	1.4		2008	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	NO	18		2008	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM <sup>3</sup> [Total trihalomethanes]	YES	87.2 Avg.	13.3-97.1		ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	NO	36 Avg.	10.6-67.4		ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon <sup>2</sup>	NO			2008	ppm	TT	TT	Naturally present in the environment.
Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	NO	1.7	1.4-1.95	2008	ppm	4	4	Water additive used to control microbes.

<sup>\*</sup>During the most recent round of Lead and Copper testing, only 1 out of 30 households sampled contained concentrations exceeding the action level.

<sup>&</sup>lt;sup>1</sup>99.3% of our samples were below the turbidity limit.

<sup>&</sup>lt;sup>2</sup>We have met all treatment technique requirements for Total Organic Carbon removal.

<sup>&</sup>lt;sup>3</sup>.TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

MCL Violation for La Vergne Water System

This is not an emergency. If it had been, you would have been notified immediately. EPA does not consider this violation to have any serious adverse health effects on human health as a result of short-term exposure; however, continued long term exposure to TTHMs levels above the standard (e.g., 20 years of exposure) has the potential to have serious adverse effects on human health. You do not need to boil your water or take other actions. If you have specific health concerns, consult your doctor.

The <u>La Vergne System</u> had 2 violations of the maximum contaminant level (MCL) for total trihalomethanes (TTHMs) as set forth by the State [Chapter XII Public Water Systems Regulation 1200-5-1-.36(7) (b)] and the Federal Primary Drinking Water Regulations (40 CFR Part 141).

The United States Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) set drinking water standards and require the disinfection of drinking water. Where disinfection is used in the treatment of drinking water, disinfectants combine with naturally occurring organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA and TDEC set standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs). Some people who drink water containing THMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

In December 1998, EPA set enforceable drinking water standards for TTHMs at 0.080 milligrams per Liter (mg/L) to reduce the risk of cancer or other adverse health effects. Compliance with the TTHMs standard for public water systems serving 10,000 or greater individuals initially became effective and enforceable on January 1, 2002. Compliance with the TTHMs standard is determined by calculating a running annual average (RAA) of quarterly TTHMs sample results. Compliance calculations performed during the first calendar quarter of 2008 shows that the system's TTHMs RAA was 0.0872mg/L and the second calendar quarter of 2008 show that the system's TTHMs RAA was 0.0862mg/L; thus, the system was in violation of the TTHMs standard. The average of 0.0872 and 0.0862 mg/L was being influenced by one high quarterly value of 0.116 mg/L obtained in September of 2007.

The causes of THM formation are natural occurring organic material in the water, chlorine, time, and temperature. In our continuing efforts to reduce the THMs, we control all of these parameters as best we can, except temperature for which there is no control. We monitor and keep the chlorine in the system as low as possible while keeping it high enough to maintain disinfection. To minimize the time in the system, we flush the system regularly to equalize the chlorine. At the Water Treatment Plant, we are also making chemical adjustments in order that the organic materials are reduced prior to chlorination.

If you have any questions about this report or concerning your water utility, please contact Thomas Champagne, tchampagne@stes.com, or by phone at 615-793-6536.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the La Vergne Water System, PWSID#TN0000386.





LA VERGNE WATER TREATMENT PLANT

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# Notice Hydrants being Flushed

The La Vergne Water Department flushes hydrants to prevent build-up of mineral deposits and better regulate chlorine residuals in the Distribution system. This process will assure the System's customers with the best water quality at the tap.

## **Cross-Connection Information**

The La Vergne Water System's Cross-Connection Program is operating to meet all requirements of the Tennessee Division of Water Supply. This requires all customers to have a backflow preventer on the main supply line to their property or facility, thus protecting the community from any cross-connections that may be present inside a customer's plumbing system.

## **Water Billing Information**

Please call La Vergne Water Billing Customer Service 615-793-5932

Monday - Friday 8:00 - 4:30 PM

#### TO PAY YOUR BILL

La Vergne City Hall – Office / Drive Thru Monday – Friday 8:00 – 4:30 PM

Credit / Debit Card Payments are accepted

We also have a convenient drop box located next to our drive thru

May 2	Senior Citizen's Prom, 5-8 p.m. Multi-Purpose Building. Call 793-3048 for more information.
July 25	La Vergne Rotary/DARE car show, Veteran's Memorial Park, 9 a.m 3 p.m.
Aug. 4	National Night Out, Veteran's Memorial Park, 6-10 p.m. Call Officer Buster Locklayer at 793-7744 for more information.
Aug. 14	Howl at the Moon 5K race, Veteran's Memorial Park, 8 p.m. Call 793-3224 for more information.
Sept. 19	Old Timers' Day, Veteran's Memorial Park 6 a.m 8 p.m. Call 207-4678 for more information.
Oct. 31	Trail of Treats, Veteran's Memorial Park, 2-4 p.m. Call 793-3224 for more information.